

Claims

1. A method for processing a call from a calling party at a calling communication station to a called party at a called communication station, the method comprising:

5 determining if calling party identification information is valid;
if the calling party identification information is not valid, transmitting a request for audible caller identification information to the calling communication station; and
transmitting the audible caller identification information to the called communication station.

10 2. The method of claim 1 further comprising:
if the calling party identification information is valid, completing the call between the calling communication station and the called communication station.

15 3. The method of claim 1 wherein determining if the calling party identification information is valid comprises:

20 detecting a directory number of the calling communication station; and
determining if the directory number has a valid number of digits.

25 4. The method of claim 3 wherein determining if the calling party identification information is valid comprises determining if the directory number has ten digits

5. The method of claim 1 wherein determining if the calling party identification information is valid comprises:

30 detecting a directory number of the calling communication station; and
determining if the directory number excludes invalid digits in predetermined locations.

6. The method of claim 5 wherein determining if the calling party identification information is valid comprises determining if the directory number starts with 2 through 9 inclusive.

5 7. The method of claim 1 wherein determining if the calling party identification information is valid comprises:
detecting a directory number of the calling communication station; and
determining if the directory number includes a valid Numbering Plan Area (NPA) number.
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8. The method of claim 7 wherein determining if the calling party identification information is valid comprises:
comparing the directory number with contents of a Valid NPA table; and
if the directory number matches an entry of the Valid NPA table,
15 determining the calling party information is valid.

9. The method of claim 1 further comprising:
receiving a terminating attempt trigger message requesting completion of
the call from the calling communication station to the called
20 communication station;
detecting in the terminating attempt trigger message a Calling Party Identifier and a Called Party Identifier, the Calling Party Identifier corresponding to the calling communication station;
determining if the Calling Party Identifier corresponds to a valid directory
25 number;
if the Calling Party Identifier is an invalid directory number, placing the Called Party Identifier in the call forward message as a Redirecting Party Identifier; and
marking the presentation indicator associated with the Redirecting Party
30 Identifier as presentation allowed.

10. A method for processing a call from a calling party at a calling communication station to a called party at a called communication station in a telecommunications network including at least one service switching point (SSP) and a service control point (SCP), the method comprising the steps of:

- at an SSP, receiving the call from the calling communication station;
- transmitting a termination attempt query from the SSP to the SCP;
- at the SCP, in response to the termination attempt query, detecting in the termination attempt query the caller identification information for the calling communication station;
- at the SCP, determining whether the caller identification information is valid;
- at the SCP, if the caller identification information is not valid, processing the call as if the call is marked presentation unavailable;
- at the SCP, determining whether standard caller identification information for the calling communication station can be provided to the called communication station;
- at the SCP, if the standard caller identification information for the calling communication station can not be provided, processing the call as if the call is marked presentation unavailable;
- for calls treated as if the call is marked presentation unavailable, transmitting a forward call message from the SCP to the SSP, the forward call message including an identifier for the called communication station; a presentation indicator for the called communication station, the presentation indicator being set to presentation allowed, and a parameter indicating that a customer selected request message should be used for the request;
- in response to the forward call message, at the SSP, originating a call connecting the calling communication station and network equipment;

from the network equipment, transmitting a request for audible
caller identification information to the calling
communication station in accordance with the customer
selected request message; and
5 transmitting the audible caller identification information to the
called communication station in a format specified by the
called party.

10 11. The method of claim 10 wherein determining whether the caller
identification information is valid comprises:
determining if the Numbering Plan Area (NPA) of the caller identification
information is invalid.

15 12. The method of claim 11 wherein determining if the NPA of the
caller identification information is invalid comprises:
determining if the Numbering Plan Area (NPA) of the caller identification
information is an approved NPA number.

20 13. The method of claim 12 wherein determining if the NPA of the
caller identification information is invalid comprises:
determining if the Numbering Plan Area (NPA) of the caller identification
information starts with a first digit set to a 0 or a 1.

25 14. The method of claim 10 wherein determining whether the caller
identification information is valid comprises:
determining if the caller identification contains a valid number of digits.

30 15. The method of claim 14 wherein determining whether the caller
identification information is valid comprises:
determining if the caller identification contains ten digits.

16. A system for processing a call from a calling party at a calling communication station to a called party at a called communication station, the system comprising:

means for determining whether caller identification information of the call for the calling communication station is valid;

means for determining whether standard caller identification information for the calling communication station can be provided to the called communication station;

means for transmitting a forward call message in response to a determination that standard caller identification information can not be provided or that the caller identification information of the call is not valid, the forward call message including an identifier for the called communication station and a presentation indicator;

means for transmitting a request for audible caller identification information to the calling communication station in response to the forward call message; and

means for transmitting the audible caller identification information to the called communication station.

17. The system of claim 16 further comprising means for determining if the Numbering Plan Area (NPA) number of the caller identification information is a valid NPA number.

18. The system of claim 16 further comprising means for determining if the caller identification information contains a valid number of digits.

19. A system for processing a call from a calling party at a calling communication station to a called party at a called communication station, the system comprising:

a service control point (SCP) operative to determine whether Calling Party ID information is valid and if not, to initiate a forward call message;

a service switching point (SSP) coupled with the SCP to receive the
forward call message and to initiate a new call; and
a service node coupled with the SSP to complete the new call to the calling
communication station to transmit a request for audible caller
identification information to the calling communication station.

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20. The system of claim 19 wherein the SCP is configured to transmit
the forward call message with an identifier for the called communication station
and a presentation indicator.

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